

APPARATUS AND METHOD FOR TRACE STREAM  
IDENTIFICATION OF A PIPELINE FLATTENER  
SECONDARY CODE FLUSH FOLLOWING A  
RETURN TO PRIMARY CODE EXECUTION

**Abstract of the Invention**

1 When an INTERRUPT SERVICE ROUTINE (SECONDARY) CODE FLUSH  
2 signal is generated in a target processor during a test  
3 procedure, a sync marker is generated in a program counter  
4 trace stream. The sync marker includes a plurality of  
5 packets, the packets identifying that the sync marker is  
6 has been generated as a result of the INTERRUPT SERVICE  
7 ROUTINE CODE FLUSH signal. The interrupt service routine  
8 code flush sync marker identifies the absolute program  
9 counter address at the time of the generation of the  
10 INTERRUPT SERVICE ROUTINE CODE FLUSH signal and relates the  
11 INTERRUPT SERVICE ROUTINE CODE FLUSH signal sync marker to  
12 a timing trace stream. The INTERRUPT SERVICE ROUTINE CODE  
13 FLUSH signal is generated at the transition between the  
14 interrupt service routine (secondary) code instructions  
15 being removed from the pipeline flattener and the program  
16 (primary) code instructions being removed from the pipeline  
17 flattener.

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